

Attachment 1

RDT SITE PRIORITIZATION FORM
(Attach site maps and environmental data summaries)

Date 5/31/06

Site Name United Zinc Site, KSN000705026

Site Location Iola, Allen County, Kansas

Last Site Assessment Action May, 2006

| |
|---------------------------|
| Site: <u>United Zinc</u> |
| ID #: <u>KSN000705026</u> |
| Depth: <u>5.0</u> |
| Other: <u>5-31-06</u> |
| <u>grom</u> |

Statement of Purpose / Issues to be discussed or Decision wanted:

Discuss United Zinc Site; decide on clean-up action requested by the KDHE. Objective is to eliminate or reduce the ingestion exposure due to the presence of high lead and arsenic levels in the soils at the site.

1. *Nature and Extent of Contamination*

Briefly discuss contaminants of concern: Volume, Concentrations found vs. Health-based benchmarks (e.g. MCL's, EBL's, RAL's, etc.), and Media Impacted.

Contaminant of concern at the site is primarily lead in soil. To date, residential yards have been sampled for soil lead content. Of the yards sampled, contain lead concentrations greater than 1200 ppm, contain lead concentrations between 400 ppm and 1200 ppm lead, and contain lead concentrations below 400 ppm. The percentages reflecting these concentrations are listed in the table below.

| < 400 ppm lead | > 400 ppm, < 1200 ppm lead | > 1200 ppm lead |
|----------------|----------------------------|-----------------|
| | | |
| | | |

2. *Site/Contaminant Stability*

Briefly describe the means and likelihood that contamination could impact other areas/media.

Lead and arsenic are currently present in soils above levels of concern. These contaminated soils may migrate via airborne dusts, surface runoff, percolation into groundwater, and by people and pets transporting soils or dusts into their homes from the affected areas. There are two creeks located within one mile of the site that may be affected by surface water run-off.

40249497



SUPERFUND RECORDS

3. *Public/Human Health Exposures/Risks*

Briefly discuss the exposure risk(s), such as - direct contact w/ media (soil, water and/or air). Inhalation risks (vapor intrusion concerns), synergistic effects of multiple contaminant exposures, and population affected should be presented.

Primary exposure route for lead and arsenic is ingestion from direct contact with soil or other contaminated media. Soils with lead levels above RSK values have been found in residential yards and one school yard. The presence of these contaminants poses a risk of exposure to sensitive receptors (i.e. children) in the effected area. The data from the 2006 sampling of this area is provided as an attachment.

4. *Ecological Risks*

5. *Known State/Public Concerns or Issues*

Briefly discuss any concerns or issues that have been raised by the local leadership, the affected community, and State or other public officials.

The state of Kansas has requested that EPA conduct a time-critical removal action at this site. The state of Kansas also requests the opportunity to conduct the post-removal site assessment.

6. *Costs/Options:*

Provide a rough estimate of the total costs involved for each proposed course of action being considered. Include all estimated costs (e.g., sampling, analysis, response action, long-term costs, etc.).

Residential areas:

residential yards with lead ppm > 1200
residential yards with lead ppm > 400

McKinley School:

samples with lead ppm > 1200

samples with lead ppm > 400

| | | |
|--|--------------|--------|
| Option 1: | | |
| Phase 1 – Remove soil with lead concentration >1200 | | |
| Phase 2 – Remove soil with lead concentration 400 - 1200 | | |
| Soil lead concentration > 1200 ppm lead | | |
| Remove/replace 4 residential yards and west side of school yard | | |
| Phase 1 | | |
| Residential yards | 4 x \$15,000 | 60,000 |
| West side of school yard | 2 x \$15,000 | 30,000 |

| | | |
|---|---------------|-------------------|
| Sub-Total Cost | | \$ 90,000 |
| Soil lead concentration 400-1200 ppm | | |
| Remove/replace 14 residential yards and south and east side of school yard | | |
| Phase 2 | | |
| Residential yards | 14 x 15,000 | 210,000 |
| South and east side of school yard | 3 x 15,000 | 45,000 |
| Sub-Total Cost | | \$ 255,000 |
| Total Cost | | \$ 345,000 |
| Option 2: | | |
| Remove/replace 18 residential yards and perimeter of school yard | | |
| Residential yards | 18 x \$15,000 | 270,000 |
| Perimeter of school yard | 5 x \$15,000 | 75,000 |
| Total Cost | | \$ 345,000 |

Politics:

There are additional yards that have yet to be sampled that may be contaminated with lead above health-based levels of concern. This fact will increase the total costs for this removal action, potentially up to one million dollars.

***RDT Decision:**

The lead contamination levels present in residential yards warrant a time-critical removal action consideration; however, additional information is necessary before the removal action is initiated.

Action Items

1. **CNSL** - Assign an attorney to the site. CNSL will assess the thoroughness of the KDHE PRP search activities and determine next steps.
2. **SUPR Removal Program** - Initiate a federal-lead (EPA) removal site evaluation to supplement the site assessment information gathered by KDHE. The information collected will better delineate the extent of contamination (the number of contaminated yards) and assess risk.
 - a. Future assessment activities (conducted by KDHE and USEPA) at lead-contaminated sites must follow the OSWER Directive #9200.4-27P, dated August 1998, *Clarification to the 1994 Revised Interim Soil Lead (Pb) Guidance for CERCLA sites and RCRA Corrective Action Facilities* and OSWER Directive #9285.7-50, dated August 2003, *Superfund Lead-Contaminated Residential Soils Handbook*. More specifically, soil samples must be collected from the surface (0-1 inch) to appropriately characterize human-health risk.
 - b. Coordinate with KDHE and local Health Department officials to determine if there is any existing information related to blood-lead levels in children. Collect the latest census data available and quantify the number of children (and their ages) residing in homes where soil lead concentrations are > 1,200 ppm and > 400 ppm, respectively.
 - c. Determine bioavailability of lead contaminating residential yards and the smelter site (slag/chat).

- d. Determine the current availability and use of the smelter slag/chat in the area.
 - e. Confirm the prevailing wind direction and pattern of airborne smelter deposition.
 - f. Assess the extent and depth of lead contamination on the smelter operation site itself to better evaluate removal action options and total project cost.
 - g. Assess sediment and water quality sample collection activities that have been completed. Work closely with WWPD and KDHE to determine the acute and chronic water quality standards are for streams and tributaries in the area (eco-risk assessment).
 - h. Work up a more accurate cost estimate, based on additional information collected during the EPA removal site evaluation.
3. Assess the site sampling protocols currently in use by the KDHE.
 - a. Example – KDHE surface samples collected for the state-lead removal site evaluation were taken at 0-3" depth; for risk assessment purposes, the surface soil samples should have been collected from 0-1" depth. Make sure the recommendations for quadrant sampling are being utilized when assessing lead contamination in residential yards (vs. grab samples). Communicate site assessment sampling expectations with KDHE. See 2. a. above
 4. Coordinate with KDHE, local health Department, Bruce Morrison, FFSE (RPM), Mike Berringer WWPD/DISO (toxicologist) in the development of the site-specific sampling plan that will be part of the EPA Removal Site Evaluation (RSE).

RDT Members Present:

1. Ken Buchholz/Katy Miley
2. Craig Smith
3. Dan Shiel
4. Gene Gunn
5. Bill Pedicino
6. Jeff Field
7. Mary Carter
8. Bob Jackson
9. Glenn Curtis
10. Janice Kroone
11. Jeremy Johnson
12. Mike Berringer
13. Terri Johnson

Date: _____

* If consensus cannot be reached in the RDT session, then action items will be established, i.e., collect additional information necessary in making a decision. Upon completion of the action items the Project Manager can request that the RDT reconvene to make a decision. It is the site managers responsibility to share the RDT decision with the state and to place the RDT decision or RDT action items in the official site file in the Superfund Records Center.